REMARKS

Claims 23 and 30 have been amended to depend from new main Claims 33 and 40, respectively. These claims have also been amended to correct an obvious error.

Claim 33 corresponds to Claim 1 prior to the present amendment except that the alkoxy group is now limited to C_1-C_4 alkoxy and R^1 is methyl. Claim 40 replaces Claim 18 and defines the antibiotic compound in a manner identical to Claim 33.

It is respectfully submitted that Claims 33-46 are fully supported by the original disclosure of the present application and of the priority Japanese Patent Application No. 136449/1980 filed September 30, 1980.

The support in the present application for the claims submitted herewith is immediately apparent from a comparison of Claim 33 and original Claim 1 and Claim 40 and original Claim 18.

With reference to Japanese Patent Application No. 136499, please consider the compound disclosed in the middle portion of page 1 of the certified English-language translation and the disclosure on page 7 of illustrative and preferred embodiments.

R^1 in the present claims corresponds to R_1 in the Japanese application. On page 1, it is disclosed as hydrogen or a lower alkyl group. On page 7, lines 2-5, it is disclosed as "preferably" hydrogen or methyl, ethyl, propyl or butyl and therefore clearly supports R^1 of the present claims which is methyl.

The substituent at the No. 3 position of the compounds of the present application is methoxymethyl. The formula on page 1 of the Japanese application discloses this substituent to be

171

$-CH_2OR_2$ and defines R_2 as a lower alkyl group. On page 7, lines 5-8, R_2 is stated to be preferably methyl, ethyl, propyl, or butyl, and therefore clearly supports the substituent in the present claims wherein the corresponding R_2 group is "methyl".

In the formula on page 1 of the Japanese application, "Y" is defined as the phthalidyl group or a group of the formula $-\underset{\displaystyle R_3}{\overset{\displaystyle |}{C}}HOCOR_4$.

The above-noted formula is the same as the corresponding formula in applicants' claims. R_3 in the Japanese application corresponds to R^2 of the claims in the present application. On page 1 of the Japanese application, R_3 is disclosed to be hydrogen or methyl, the same substituents specified for R^2 in applicants' claims.

R_4 of the Japanese application corresponds to R^3 in the claims of the present application. On page 1 of the Japanese application, R_4 is defined as a lower alkyl group or a lower alkoxy group. On page 7, lines 13 through 15, R_4 is defined as a methoxy, ethoxy, propoxy or butoxy group. The two propoxy isomers and the three butoxy isomers are specifically disclosed. These are all part of the preferred Y substituents as noted on lines 8-15 of page 7 of the Japanese application.

The compound which is specified in Claims 23 and 30 is specifically disclosed on pages 38 and 39 (Example 6) of the Japanese application.

The pharmaceutically acceptable salts are disclosed on page 1 and at other places in the Japanese application including the Example in the paragraph bridging the last two pages, namely pages 42 and 43.

17

The claimed pharmaceutical compositions which define the antibiotic compound component thereof in terms of the compound discussed hereinbefore are disclosed throughout the Japanese application starting on page 5 which specifically discloses the compositions referred to as "an oral treating agent for infectious disease comprising...".

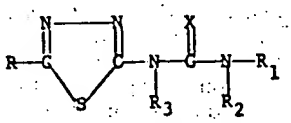
Although applicants' claimed subject matter is only a portion of the compounds and compositions disclosed in the Japanese application, it is a substantial portion. Thus, referring to R^1, methyl is a substantial portion of the original disclosure of the preferred hydrogen, methyl, ethyl, propyl and butyl. The final methyl group in the No. 3 substituent is a substantial portion of the originally disclosed lower alkyl comprising methyl, ethyl, propyl and butyl.

With reference to the substituent at the No. 4 position, the groups specified in the present application are those of the general formula specified for Y in the Japanese application limited to the lower alkoxy substituent for R_3, whereas the Japanese application also discloses the corresponding lower alkyl group.

In the leading decision concerning entitlement to benefit of an earlier date when the claimed subject matter is carved out of a broader original disclosure, In re Driscoll, 195 USPQ 434 (CCPA 1977), the original disclosure which is photocopied below in the right column, was held to support Claim 13 which is in the left column.

173

13. A Compound of the Formula



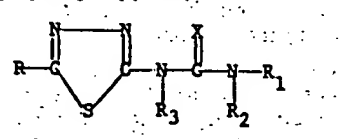
wherein R is alkylsulfonyl (C_1-C_6);

R_1 is selected from the group consisting of H, alkyl (C_1-C_4), and cycloalkyl (C_3-C_6);

R_2 is from the group consisting of H, alkyl (C_1-C_4), haloalkyl (C_1-C_4), alkoxy (C_1-C_4), alkenyl (C_2-C_4), alkynyl (C_2-C_4), aryl, and haloaryl, and wherein R_1 and R_2 are alkylene which, together with N, form a ring of at least 3, but not more than 6 members;

R_3 is H or alkyl (C_{16}); and X is selected from the group consisting of oxygen and sulfur.

In accordance with the invention, there is provided a compound of the formula [paragraphing supplied]:



wherein R is selected from the group consisting of H, alkyl (C_1-C_6), haloalkyl (C_1-C_6), cycloalkyl (C_3-C_6), halocycloalkyl (C_3-C_6), alkoxy, alkoxyalkyl, alkoxyalkylthio, aryl, substituted aryl, alkenyl (C_2-C_6), alkylthio (C_1-C_6), alkylsulfoxide (C_1-C_6), and alkylsulfonyl (C_1-C_6);

R_1 is selected from the group consisting of H, alkyl (C_1-C_4), and cycloalkyl (C_3-C_6);

R_2 is from the group consisting of H, alkyl (C_1-C_4), haloalkyl (C_1-C_4), alkoxy (C_1-C_4), alkenyl (C_2-C_4), alkynyl (C_2-C_4), aryl and haloaryl, and wherein R_1 and R_2 are alkyl which, together with N, form a ring of at least 3, but not more than 6 members;

R_3 is H or alkyl (C_{16}); and X is selected from the group consisting of oxygen and sulfur.

In Driscoll, R in the claim was limited to alkylsulfonyl (C_1-C_6), namely to one group containing only six members from an original broad disclsoure wherein R was 14 generic groups which included "alkoxy, alkoxyalkyl, alkoxyalkylthio, aryl, and substituted aryl". The above-quoted five groups alone include thousands of possibilities whereas the R group of alkylsulfonyl only includes six possibilities. It is clear that the selection carved out of Driscoll and held to be supported therein was a selection which is smaller by several order of magnitude than the substantial selection from the Japanese application which is the subject of the claims in the present application.

The Driscoll decision is consistent with earlier decisions and particularly In re Johnson et al, 194 USPQ 187 (CCPA 1977), and In re Wertheim et al, 191 USPQ 90 (CCPA 1976), and the decisions cited on page 13 of applicants' AMENDMENT filed February 18, 1983.

174

It is further respectfully submitted that dependent compound Claims 34-37 which further specify that the three R Groups are one or another of the very few groups encompassed by Claim 33 are similarly fully supported by the disclosure in the Japanese application. All of the groups recited in these claims are expressly disclosed to be preferred groups on page 7 of the Japanese application. Claim 33 permits only a relatively few combinations of the R^2 and R^3 groups and one skilled in the art studying Claim 33 would immediately recognize all of the relatively few possible combinations. The foregoing applies equally to the corresponding composition claims.

The "syn" isomers are the subject of Claims 38, 39, 45 and 46. The present application at page 13, last four lines, discloses that the syn-isomers are preferred. The syn isomers are disclosed throughout the Japanese priority application, see for example, pages 5 and 6.

It is respectfully submitted that all of the claims in the present application are supported by the disclosure in the Japanese priority application and are, therefore, entitled to the benefit of the priority date of September 30, 1980.

With the exception of Claims 21, 25, 28 and 32, the claims were rejected under 35 USC 103 as being unpatentable over the Durckheimer patent. The traverse of the rejection based on the Durckheimer patent which is set forth in detail on pages 7-10 of applicants' AMENDMENT filed February 18, 1983 are repeated herein. Essentially it is the position that applicants' claims are directed to compounds which have unusual effectiveness when administered via oral administration. There is nothing in the very broad disclosure of the reference which would lead one to the narrow

selection therefrom which comprises applicants' claims which have unexpected properties when compared with the most closely related compounds of the prior art. The foregoing was established in the DECLARATION PURSUANT TO 37 CFR 1.132 of Dr. Nagao dated December 20, 1982 which presented comparative data. Claims which were specific to the two species of applicants' claimed invention disclosed in the DECLARATION and established to have superior properties were allowed thereby recognizing the basis for patentability of applicants' claimed compounds and compositions. The aforesaid two species of applicants' claimed invention dislcosed in the DECLARATION (one of which has been transferred to the divisional application) establish the equivalence of hydrogen and the methyl group as the R^2 substituent. It is respectfully submitted that the data for the compounds containing the R^3 butoxy group is illustrative of the C_1-C_4 alkoxy substituents specified in applicants' claims. It is, therefore, respectfully submitted that the data establishing unexpected properties for the tested compounds applies equally to the very small group of compounds within the scope of applicants' claims. It is, therefore, respectfully submitted that applicants' showing of unexpected properties is consistent in scope with applicants' claims and establishes the patentable distinctiveness of applicants' claimed subject matter.

It is respectfully submitted that the foregoing establishes that applicants' claims are directed to a narrow group of compounds which are not disclosed in the Durckheimer reference and are a very narrow unobvious selection from the compounds falling within the voluminous disclosure of Durckheimer. As noted herein and in the DECLARATION of record, applicants' claimed compounds have unexpected properties when compared with the compounds disclosed by Durckheimer. It is, therefore, respectfully submitted that applicants' claims are patentably distinguished from the Durckheimer reference.

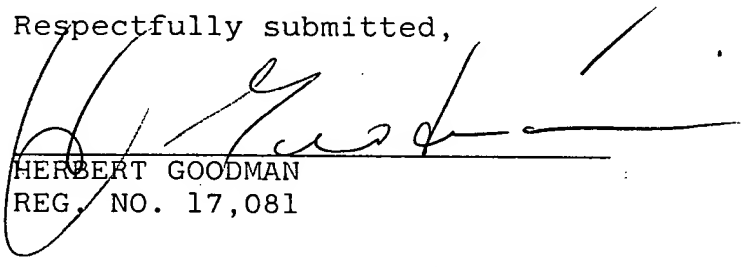
It is also respectfully submitted that applicants have established that the present claims are supported by applicants' priority documents and, therefore, predate the cited Takaya EP 029,557 reference and the cited Heymes EP 034,536 reference.

The Takaya Patent No. 4,409,215 issued October 11, 1983 appears to correspond to the cited Takaya EP 029,557. Although Patent No. 4,409,215 is a reference as of November 14, 1980, whereas EP 029,557 is a reference as of June 3, 1981, the effect is the same since both of the Takaya dates predate applicants' September 23, 1981 U.S. filing date and are, in turn, rendered ineffective as references by applicants' September 30, 1980 priority date of Japanese Application No. 136449. For convenience, copies of pages 1, 5, 7, 38, 39, 42 and 43 of the Japanese priority application No. 136449 which are specifically referred to hereinbefore are enclosed herewith. The certified English-language translation of No. 136449 was filed February 25, 1983.

Reconsideration of the rejection is requested. Allowance is solicited.

Please apply the enclosed check in the amount of $210.00 as the fee for the additional claims added herein.

Respectfully submitted,



HERBERT GOODMAN
REG. NO. 17,081

261 Madison Avenue
New York, NY 10016
(212) 972-1400

HG/fs

Enc.:

Form PTO-1449
Copies of pages 1, 5, 7, 38, 39, 42 and 43 of English-language translation of Japanese Application 136449.
Check $210.00

177